

NEPA CINEREA LINNAEUS, 1758 (INSECTA, HETEROPTERA, NEPIDAE): PROPOSED CONSERVATION UNDER THE PLENARY POWERS. Z.N.(S.) 2144

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Linnaeus, 1758, p. 440, described under the name *Nepa cinerea* the well known water-scorpion. The description was accompanied by many references to the older literature. *Nepa rubra* was described by Linnaeus, 1758, on the same page as *N. cinerea* but several lines above. A more detailed description was published subsequently (Linnaeus, 1764).

2. Fabricius, 1794, p. 62, has used the name *Nepa rubra* Linnaeus for a nepid from the Oriental region, which is known now as *Laccotrephes kohlii* Ferrari, 1888. The name *Laccotrephes ruber* (Linnaeus, 1758) was used for this or related species by many authors (the last use to my knowledge by Hafiz and Pradhan, 1949).

3. Esaki, 1926, discovered that: a) the descriptions of *Nepa rubra* by Linnaeus, 1758, 1764, cannot be applied to any species of *Laccotrephes* and certainly apply to *Nepa cinerea*; b) the type specimen of *Nepa rubra* in the Linnean collection in the Zoological Museum of the University in Uppsala is a specimen of *Nepa cinerea* with expanded elytra and wings.

4. Tamanini, 1973, believed that the synonymy of *N. rubra* and *N. cinerea* established by Esaki, 1926, is wrong and the name *rubra* should be resurrected for the species of the genus *Laccotrephes*. His arguments against the synonymy with *N. cinerea* are: (i) the remark in Linnaeus, 1758: "habitat in calidis regionibus" shows that *N. rubra* is an extrapalaearctic species, while *N. cinerea* is unknown outside Palaearctica; (ii) the label under the supposed type specimen of *N. rubra*, according to a letter of Dr. Gustavson (Uppsala) to Esaki, was not written by Linnaeus himself, hence this specimen is possibly not the type. I think the objections of Tamanini cannot be taken into consideration.

5. Concerning the type locality of *N. rubra*, it is stated in Linnaeus, 1764: 'Habitat —'; it is evident from this remark that the origin of the type specimen was unknown to Linnaeus and his previous statement ("habitat in calidis regionibus") was only a supposition.

6. Concerning the label of *N. rubra*, the following explanation can be given. As can be seen from the photograph in Esaki, 1926, the label is not pinned under the specimen but is written on the bottom of the box. The inscription is 'rubra. Mus. Gust. Adolphi' and is made in two different handwritings. The inscription

'Mus. Gust. Adolphi' is certainly post-linnean, because Linnaeus died in 1778, whereas the Swedish King Gustav IV Adolph was born in 1778. It is known (Horn & Kahle, 1936, p. 285) that the collection of Queen Ludovica Ulrica, from which *N. rubra* was described, was bequeathed to Gustav IV Adolph and in 1803 was received by the University of Uppsala. The inscription 'Mus. Gust. Adolphi' is well explained by the history of this collection. It is not clear who made the inscription 'rubra'. Even if it was made not by Linnaeus himself but by somebody who rearranged the collection, it does not give any evidence, that the type specimen of *N. rubra* was confused, because this specimen is in full accordance with the original descriptions. Hence the synonymy of *N. rubra* with *N. cinerea* is supported not only by the type specimen but by the descriptions of Linnaeus, 1758, 1764, too, so I think this synonymy cannot be doubted.

7. Acting as first reviser, Esaki has employed the 'rule of page- and line-priority' which had been accepted by several zoologists and which Esaki took to be an officially accepted rule of nomenclature but which was never officially acknowledged except for a short period between 1948 and 1953 (see *Bull. zool. Nom.* vol. 4 pp. 328-330; *Copenhagen Decisions*, pp. 66-67). As a result of this oversight Esaki, 1926, changed the universally used name of a well-known insect *Nepa cinerea* to *N. rubra*. However, Esaki, 1928, himself and nearly all his contemporaries subsequently used the name *N. cinerea*. Stichel, 1934, 1955; Jordan, 1950 and Poisson, 1957 accepted Esaki's 1926 renaming and are followed in the last 20 years by many other hemipterologists (M. Josifov, I. Lansbury, R. Linnavuori, N. Nieser, G. Seidenstücker, E. Wagner and others), although many authors used *N. cinerea* as the valid name (Macan, 1956; Hoberlandt, 1959; Southwood and Leston, 1959; Soós, 1963; Kerzhner and Jaczewski, 1964; Putshkova, 1969; Kanyukova, 1973 and others) or returned to such use after the publication of Tamanini's paper (Ribes, 1974).

8. I think it would be desirable to suppress under the plenary powers the unfortunate first reviser action of Esaki, 1926, so as to validate the name *Nepa cinerea* and thus stabilize the nomenclature. The following information shows that *N. cinerea* is preferable to *N. rubra*:—

- (i) *Nepa cinerea* was the binomen definitely proposed by Linnaeus for this well-known insect, while *Nepa rubra* was described as a distinct species owing to a mistake (see Esaki 1926).
- (ii) The identity of *Nepa cinerea* was correctly determined by all zoologists while *Nepa rubra* was misidentified during more than 100 years.

- (iii) *Nepa cinerea* was used as the valid name of the species by all authors from 1758 up to 1926, by the absolute majority of authors from 1926 up to 1955 and by many authors from 1955 up to now, e.g. more than 200 years, while *Nepa rubra* was used by authors only in the last 20 years.
- (iv) *Nepa cinerea* was described from 'Europa' and since the species was known to Linnaeus from Sweden, Tamanini, 1973, restricted the type locality to Sweden. *Nepa rubra* is described from a specimen of unknown origin. Recently several subspecies of *N. cinerea* have been described from Western Mediterranean and from Siberia. In most cases the association of a given specimen to any subspecies cannot be established. If the name *Nepa rubra* were to be validated this would lead to uncertainty in the nomenclature of subspecies.

9. In accordance with the above, the International Commission on Zoological Nomenclature is asked:

- (1) to use its plenary powers to set aside the first reviser action of Esaki (1926);
- (2) to place the following specific name on the Official List of Specific Names in Zoology:
cinerea Linnaeus, 1758, as published in the binomen *Nepa cinerea*;
- (3) to place the following specific name on the Official Index of Rejected and Invalid Specific Names in Zoology:
rubra Linnaeus, 1758, as published in the binomen *Nepa rubra* (ruled under the plenary powers in (1) above to be a junior synonym of *Nepa cinerea* Linnaeus, 1758).

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